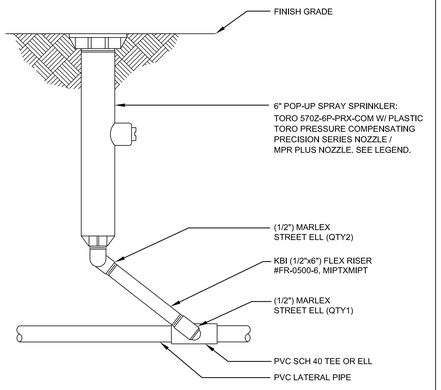
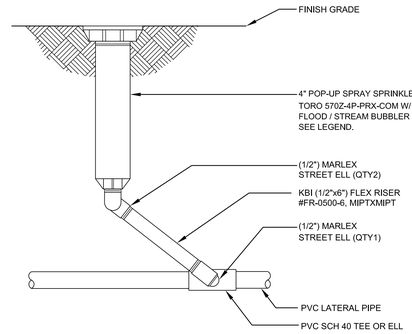


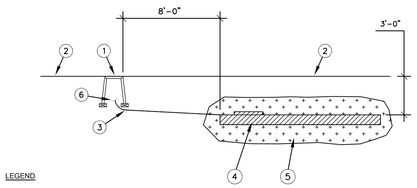
NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

01 6" POP-UP SPRAY SPRINKLER : NTS



NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

04 4" POP-UP SPRAY SPRINKLER : NTS

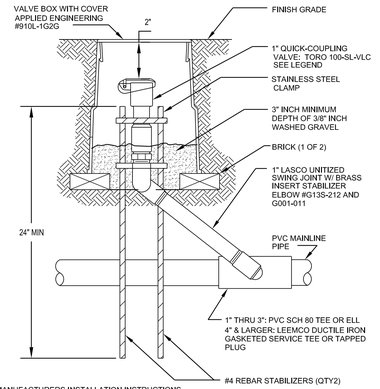


LEGEND

1. REMOTE CONTROL VALVE BOX OR COMMUNICATION CABLE SPLICE VALVE BOX WITH DECODER LINE SURGE PROTECTOR, #DEC-SG-LINE, SEE DETAILS #03, #06, #08 & #09.
2. FINISH GRADE
3. SOLID BARE COPPER GROUNDING WIRE (#6 AWG) FROM DECODER LINE SURGE PROTECTOR #DEC-SG-LINE TO COPPER GROUNDING PLATE, MAKE WIRE RUNS AS STRAIGHT AS POSSIBLE
4. 4" X 96" COPPER GROUNDING PLATE WITH 25 FT OF #6 AWG BARE COPPER WIRE WELDED TO THE PLATE AS MANUFACTURED BY PAIGE ELECTRIC #182199L
5. POWER SET GROUNDING ENHANCEMENT BACKFILL MATERIAL AS MANUFACTURED BY LORESCO, MIN OF FIVE 50 LB BAGS REQ'D PER LOCATION
6. CONNECT TO DECODER LINE SURGE PROTECTOR, #DEC-SG-LINE.

NOTES:
1. INSTALL DEC-SG-LINE NO FURTHER THAN 400 FT FROM ANY DECODER.
2. INSTALL DECODER GROUNG PLATE 4'-6" FROM DEC-SG-LINE, DO NOT INSTALL IN THE SAME TRENCH A TDC WIRE PATH (COMMUNICATION CABLE).
3. NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

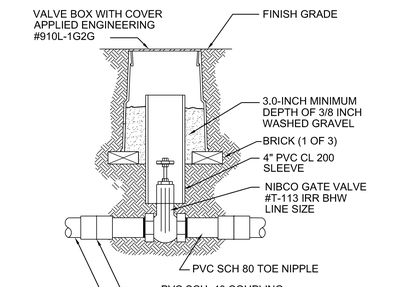
07 TWO-WIRE PATH DECODER GROUNDING : NTS



NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

NOTE: OWNER TO APPROVE ALL QUICK COUPLER VALVE LOCATIONS PRIOR TO INSTALLATION.

10 QUICK COUPLER VALVE : NTS

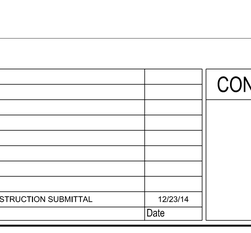


(3" GATE VALVES AND SMALLER)

NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

13 MAINLINE GATE VALVE : NTS

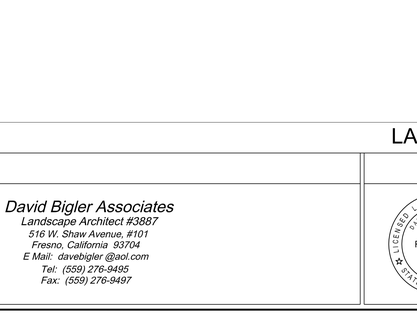
FILTER SIZE CHART		
VALVE SIZE	FILTER SIZE	FILTER MODEL
1"	1"	T-ALFD10150-L
1 1/2"	1 1/2"	T-ALFD15150-L
2"	1 1/2"	T-ALFD15150-L



1. PVC LATERAL PIPE
2. PVC SCH 40 FEMALE ADAPTER (1 OF 2), LINE SIZE
3. TORO Y-FILTER WITH 150 MESH DISC ELEMENT FILTER, SAME SIZE AS VALVE, USE 1 2" FILTER WITH REDUCING FEMALE ADAPTER FOR 2" VALVES.
4. VALVE BOX W/ COVER: 12" SIZE TO MATCH IRRIGATION CONTROL VALVES.
5. 3/4" PVC CAP
6. FINISH GRADE
7. 3" MIN DEPTH OF 3/8" WASHED GRAVEL
8. BRICK (1 OF 4)

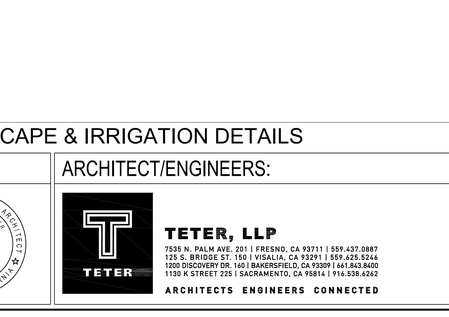
NOTE: INSTALL LINE SIZE FILTER (SEE FILTER SIZE CHART) ON BUBBLER VALVES IN SEPARATE VALVE BOXES - ADJACENT TO REMOTE CONTROL VALVE. FILTERS ARE TO BE INSTALLED ON DISCHARGE SIDE OF VALVE.

02 Y-FILTER DETAIL (BUBBLER VALVES) : NTS



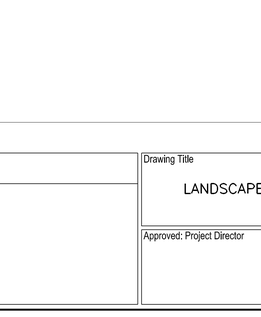
NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

05 6" POP-UP SPRAY SPRINKLER : NTS



NOTE: LOCATE J BOXES A MAXIMUM OF 200' ON CENTER OR AT ALL CHANGES IN DIRECTION OF NINETY DEGREES OR MORE, AT ALL SPLICE (NOT IN VALVE BOX) AND AT DEAD END STUBS.

08 COMMUNICATION CABLE SPLICE : NTS

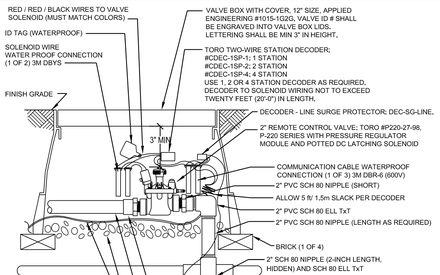


1. 4-INCH GRATE
2. BUBBLER: RAIN BIRD 1404 - 1.0 GPM
3. ROOT WATERING SYSTEM: RAIN BIRD RWS-B-C-1404 (INCLUDES 1404 1.0 GPM BUBBLER WITH RISER, GRATE, SWING ASSEMBLY, 1/2" MALE NPT INLET, AND BASKET CANISTER)
4. FINISH GRADE
5. PEA GRAVEL - 1.0 cu. ft.
6. 1/2-INCH PVC SCH 80 NIPPLE
7. 1/2-INCH 90-DEGREE ELBOW
8. 12-INCH SWING ASSEMBLY
9. 1/2-INCH MALE NPT INLET
10. PVC SCH 40 TEE OR EL
11. LATERAL PIPE
12. 4-INCH BASKET WEAVE CANISTER

NOTE: INSTALL ROOT WATERING SYSTEM WITH BUBBLER INSIDE THE TREE WATERING BASIN AND INSIDE THE TREE ROOT BARRIER.

11 TREE BUBBLER : NTS

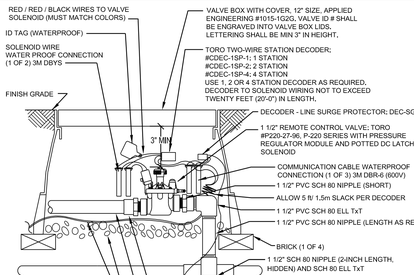
14 NOT USED : NTS



NOTES
1. Install a maximum of one remote control valve per 12" rectangular valve box.
2. All TORO Two-Wire Station Decoders shall have a 5 digit address.
3. Install DEC-SG-LINE no further than 400 ft from any decoder.
4. Install Decoder Grounding Plate 4'-6" from DEC-SG-LINE, do not install in the same trench a TDC Wire Path (Communication Cable). See Detail #07.
5. Install 1" Toro Y-Filter #T-ALFS10150-L with 150 mesh stainless screen for all bubbler valves in seperate adjacent valve box, See Detail #02.

NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

03 1" REMOTE CONTROL VALVE : NTS



NOTES
1. Install a maximum of one remote control valve per 12" rectangular valve box.
2. All TORO Two-Wire Station Decoders shall have a 5 digit address.
3. Install DEC-SG-LINE no further than 400 ft from any decoder.
4. Install Decoder Grounding Plate 4'-6" from DEC-SG-LINE, do not install in the same trench a TDC Wire Path (Communication Cable). See Detail #07.

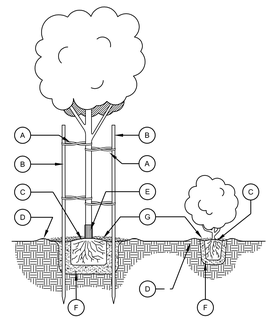
NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

06 1 1/2" REMOTE CONTROL VALVE : NTS

NOTES
1. Install a maximum of one remote control valve per 12" rectangular valve box.
2. All TORO Two-Wire Station Decoders shall have a 5 digit address.
3. Install DEC-SG-LINE no further than 400 ft from any decoder.
4. Install Decoder Grounding Plate 4'-6" from DEC-SG-LINE, do not install in the same trench a TDC Wire Path (Communication Cable). See Detail #07.

NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

09 2" REMOTE CONTROL VALVE : NTS



KEY NOTES

- (A) TREE TIES TO BE APPROVED RUBBER OR PLASTIC STRAPS NAILED TO STAKES
- (B) TREATED 2"x10' LODGE POLE STAKE TO BE SET VERTICAL
- (C) TOP OF ROOT BALL IS TO BE SET SLIGHTLY ABOVE FINISH GRADE
- (D) CONSTRUCT WATER BASIN TO THE DIAMETER NOTED BELOW WITH 3" BERM AROUND PERIMETER. SOFTEN BERM IN TURF AREAS, REMOVE ALL TURF WITHIN BERM AREA IN TURF AREAS

BERM DIAMETER	SIZE OF PLANT
48"	36" BOX
36"	24" BOX
30"	15 GALLON PLANT
16"	5 GALLON PLANT
12"	1 GALLON PLANT

- (E) EXPANDIBLE STRING TRIMMER TREE BOOT, USE ON TREES INSTALLED IN TURF AREAS ONLY
- (F) AGRIFORM PLANT FERTILIZER TABLETS
- (G) MULCH AS TOP DRESSING ALL NON TURF LANDSCAPE AREAS WITH SUPERIOR WALK ON BARK (FOREST PRODUCT) AS SUPPLIED BY SUPERIOR SOIL SUPPLEMENTS, (559) 904-3372. INSTALL TO A COMPACTED DEPTH OF THREE INCHES (3"). DO NOT ENGULF THE STEMS OR TRUNKS OF SHRUBS AND TREES.

PLANTING NOTES

1. THE CONTRACTOR IS TO DRILL 18" DIAMETER HOLE PER TREE, HOLES ARE TO BE TO A MIN. DEPTH OF TEN FEET (10'). BACKFILL WITH ORIGINAL SOIL. DRAINAGE HOLE IS TO BE OFF SET FROM THE PLANTING HOLE TO PREVENT SETTLEMENT OF THE TREE OR SHRUB.
2. PLANTING HOLE IS TO BE TWICE THE DIAMETER OF CONTAINER WITH DEPTH EQUAL TO ROOT BALL, PLUS FOUR INCHES. BACKFILL WITH 85% CLEAN NATIVE SOIL MIXED WITH 15% NITROLIZED COMPOST. APPLY AGRIFORM PLANT FERTILIZER TABS TO BACKFILL AS FOLLOWS.

# OF TABS	SIZE OF PLANT
2	1 GALLON SIZE
4	5 GALLON SIZE
6	15 GALLON SIZE
8	24" BOX SIZE
10	36" BOX SIZE

3. PLACE TREE OR SHRUB IN CENTER OF PLANTING HOLE.
4. TAMP BACKFILL TO FORCE OUT ALL AIR POCKETS. FOOT TAMP BACKFILL BELOW ROOT BALL TO PREVENT SETTLEMENT.
5. WATER TREE OR SHRUB IMMEDIATELY AFTER PLANTING
6. DOUBLE STAKE, WITH ONE STAKE TO BE PLACED ON THE WINDWARD SIDE AND THE OTHER PLACED ON THE LEEWARD SIDE OF THE TYPICAL PREVAILING WIND. TOP OF STAKE IS TO BE SIX INCHES BELOW THE BRANCHING POINT OF THE CROWN.

12 TREE AND SHRUB PLANTING DETAIL : NTS

LANDSCAPE & IRRIGATION DETAILS

NTS | 6

100% CD - NOT FOR CONSTRUCTION SUBMITTAL	12/23/14
Revisions:	Date

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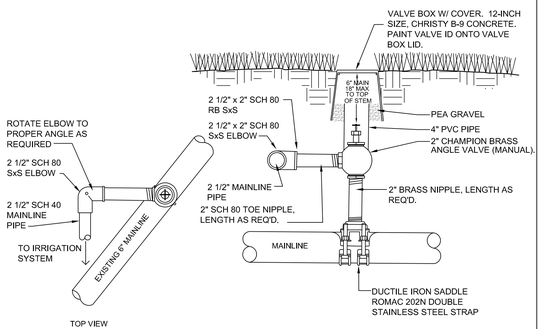
ARCHITECTS ENGINEERS CONNECTED

Drawing Title: LANDSCAPE & IRRIGATION DETAILS	Project Title: VA MONUNMENT WALK OF HONOR		Project Number: ----
			Building Number: –
Approved: Project Director	Location: FRESNO, CA		Drawing Number: L401
	Date: 12-23-14	Checked: DB	Drawn: SV
			Dwg. of

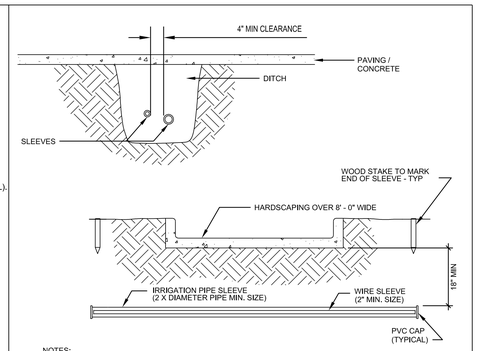
Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231



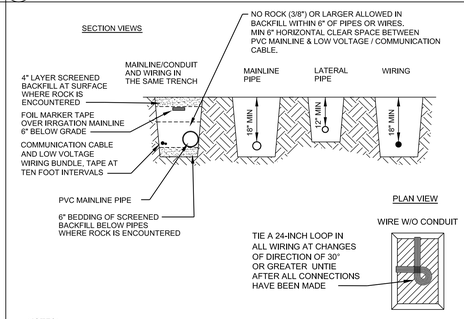
15 POC: 2" MANUAL VALVE w/ 2 1/2" MAINLINE : NTS



NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE PVC SCHEDULE 40 PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. IRRIGATION PIPES AND LOW VOLTAGE WIRES ARE TO BE SLEEVED SEPARATELY.
4. ALL PIPES & WIRES ARE TO BE SLEEVED UNDER PAVED/CONC. 6'-0" WIDE OR WIDER. MECHANICALLY COMPACT TO 95% PROCTOR.

NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

18 SLEEVING : NTS



NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH PVC SCHEDULE 40 TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN. MIN SLEEVE SIZE IS 2".
2. INSTALL ALL PIPE AND WIRE IN STRICT CONFORMANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS

NOTE: SEE MANUFACTURERS INSTALLATION INSTRUCTIONS

16 NOT USED : NTS

19 TRENCHING DETAIL : NTS

SPRINKLER FLOW RATE CHART	
SYMBOL	RESPECTIVE FLOW RATE (GPM)
● ⊖ ⊕ ○	0.25 GPM, 0.25 GPM, 0.5 GPM, 1.0 GPM
△△△△△△	0.39 GPM, 0.52 GPM, 0.64 GPM, 1.05 GPM, 1.22 GPM, 1.6 GPM
◒⊖⊘	0.2 GPM, 0.38 GPM, 0.68 GPM
◔⊖⊖⊘⊕○	0.39 GPM, 0.52 GPM, 0.64 GPM, 1.05 GPM, 1.22 GPM, 1.6 GPM
◔◒◒⊘⊘●	0.61 GPM, 0.82 GPM, 1.28 GPM, 1.61 GPM, 1.9 GPM, 2.4 GPM
◒□◪	0.2 GPM, 0.38 GPM, 0.68 GPM
⧓⊠	0.5 GPM, 1.0 GPM
◇	90° - 0.4 GPM, 180° - 0.74 GPM
△	90° - 0.86 GPM, 180° - 1.82 GPM

LATERAL PIPE SIZING CHART	PIPE SIZE	ALLOWABLE FLOW (GPM)
	3/4"	0 - 8.0
	1"	8.1 - 16.0
	1 1/2"	16.1 - 36.0
	2"	36.1 - 55.0

NOTE: CONTRACTOR TO USE SPECIFIED NOZZLE RATING (GPM) FOR LATERAL PIPE SIZE CALCULATIONS AS SHOWN IN THE SPRINKLER FLOW RATE CHART. FLOW RATINGS (GPM) ARE TO BE USED AT THE 50 PSI PRESSURE. FLOW VELOCITIES OF FOUR FEET PER SECOND SHALL NOT BE EXCEEDED. PIPE SIZES NOTED ON THE PLAN SHALL SUPERCEDE CALCULATED PIPE SIZES BY THE CONTRACTOR. LANDSCAPE ARCHITECT TO REVIEW ALL PIPE SIZING IN THE FIELD PRIOR TO BACKFILL OFANY TRENCHES. CONTRACTOR TO SUBMIT A SHOP DRAWING FOR REVIEW AND APPROVAL PRIOR TO TRENCHING.

17 NOT USED : NTS

20 LATERAL PIPE SIZING CHART : NTS

LANDSCAPE AND IRRIGATION GENERAL NOTES

1. PRODUCT "OR APPROVED EQUAL" SPECIFICATION NOTE: ALL SPECIFIED MATERIALS, PRODUCTS AND MANUFACTURERS ARE RELEVANT TO DESCRIBE THE REQUIRED QUALITY AND FEATURES OF A PARTICULAR COMPONENT OF THE PROJECT, HOWEVER, THE SPECIFIC PRODUCT OR MANUFACTURER NOTED IS TO BE CONSTRUED TO BE FOLLOWED BY THE WORDS, "OR APPROVED EQUAL".

2. GENERAL NOTE: THE CONTRACTOR IS TO SUPPLY ALL EQUIPMENT, MATERIALS AND LABOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. ADDITIONAL EQUIPMENT AND MATERIALS IN ADDITION TO THE SYSTEM COMPONENTS LISTED IN THE LEGEND MAY BE REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.

3. SPRINKLER ADJUSTMENT NOTE: CONTRACTOR SHALL MAKE ANY ADJUSTMENTS OR CHANGES TO SPRINKLERS, NOZZLES, RADIUS AND ARCS AS REQUIRED TO PROVIDE 100% COVERAGE TO ALL LANDSCAPE AREAS AND PREVENT OVER SPRAY ONTO BUILDINGS OR HARDSCAPED SURFACES.

4. EXISTING IRRIGATION SYSTEM AND WATERING NOTE: THE CONTRACTOR IS RESPONSIBLE TO KEEP THE EXISTING IRRIGATION SYSTEM TO REMAIN OPERATIONAL TO IRRIGATE ALL LANDSCAPED AREAS. WHERE AUTOMATIC OPERATION OF EXISTING IRRIGATION SYSTEMS IS INTERRUPTED DUE TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS RESPONSIBLE TO SUPPLY TEMPORARY IRRIGATION TO NEW AND/OR EXISTING AREAS THAT ARE EFFECTED BY THE SERVICE INTERRUPTION AS REQUIRED DUE TO PREVAILING WEATHER CONDITIONS. THE CONTRACTOR SHALL MAKE REPAIRS TO THE EXISTING SYSTEM AS NEEDED. THE CONTRACTOR IS TO ASSIST MAINTENANCE PERSONNEL AS NEEDED TO KEEP THE EXISTING LANDSCAPED AREAS IRRIGATED. AREAS AFFECTED BY NEW CONSTRUCTION ARE TO BE IRRIGATED BY THE CONTRACTOR. CONTRACTOR IS TO REPLACE ANY DEAD OR STRESSED PLANT MATERIALS (TO MATCH EXISTING) THAT WERE TO REMAIN THAT WERE DAMAGED DUE TO CONSTRUCTION ACTIVITIES.

5. EXISTING IRRIGATION SYSTEM TO BE REPLACED BY NEW IRRIGATION SYSTEM NOTE: THE CONTRACTOR IS TO REMOVE EXISTING SPRINKLERS, VALVES AND OTHER IRRIGATION IMPROVEMENTS VISIBLE AT THE SURFACE IN AREAS TO RECEIVE NEW IRRIGATION AND DELIVER SALVAGED PARTS, INCLUDING, BUT NOT LIMITED TO SPRINKLERS, VALVES, VALVE BOXES ETC., TO THE MAINTENANCE DEPARTMENT. PIPING IS TO BE REMOVED WHERE IT INTERFERES WITH CONSTRUCTION ACTIVITIES, OTHERWISE PIPING MAY BE ABANDONED BELOW GRADE. WHERE PIPING IS BROUGHT TO THE SURFACE, THE CONTRACTOR SHALL CUT IT OFF A MINIMUM OF 12" BELOW GRADE. DEPRESSIONS AND HOLES THAT ARE CREATED FROM REMOVING EXISTING IRRIGATION IMPROVEMENTS BEING REPLACED ARE TO BE FILLED WITH CLEAN TOPSOIL LEVEL WITH SURROUNDING GRADE AND COMPACTED. IRRIGATION SYSTEM AND BUILDING WATER ARE TO REMAIN INTACT AND OPERATIONAL.

6. SITE IRRIGATION WATER AVAILABILITY NOTE: THE CONTRACTOR IS TO INSTALL ALL REROUTED MAINLINE PIPES WHILE LEAVING THE EXISTING IRRIGATION SYSTEM IN SERVICE DURING THE PROJECT. WHEN ALL PIPING AND WIRE REROUTING WORK IS COMPLETE THE CONTRACTOR MAY ARRANGE TO SHUT OFF THE WATER TO MAKE FINAL CONNECTIONS FOR A PERIOD OF TIME NOT TO EXCEED ONE DAY. THE MAINTENANCE SUPERVISOR IS TO BE GIVEN A MINIMUM OF ONE WEEK WRITTEN NOTICE TO OVERWATER THE SITE IN QUESTION PRIOR TO SHUTTING OFF THE WATER TO MAKE FINAL CONNECTIONS. IF PREVAILING WEATHER CONDITIONS ARE OVER 95 DEGREES DAYTIME HIGH TEMPERATURES, THEN THE SHUT DOWN DURATION MAY BE LIMITED TO NO MORE THAN ONE PARTIAL DAY AS DECIDED BY MAINTENANCE SUPERVISOR.

7. MANUAL IRRIGATION NOTE: THE CONTRACTOR IS RESPONSIBLE TO MANUALLY IRRIGATE ANY EXISTING IRRIGATION SYSTEM AREAS ON THE SITE WHERE THE EXISTING AUTOMATIC OPERATION OF THE EXISTING SYSTEMS TO REMAIN AND PROTECT ARE INTERRUPTED DUE TO CONSTRUCTION ACTIVITIES. DEPENDING UPON PREVAILING WEATHER CONDITIONS, DAILY WATERING MAY BE REQUIRED AS REQUESTED BY THE MAINTENANCE SUPERVISOR. THIS MAY INCLUDE A LARGE AREA WITH DOZENS OF REMOTE CONTROL VALVES. THE CONTRACTOR IS TO CAREFULLY FIELD VERIFY AND COORDINATE WORK TO AVOID DAMAGING THE EXISTING PIPING OR WIRING THAT MAY REQUIRE MANUAL IRRIGATION OF THE SITE BY THE CONTRACTOR FOR EXTENDED PERIODS OF TIME.

8. EXISTING TURF, PLANTS & TREES TO REMAIN & PROTECT NOTE: THE CONTRACTOR IS RESPONSIBLE TO REPLACE ANY EXISTING TURF, PLANT MATERIALS OR TREES THAT ARE TO REMAIN AND PROTECT. EXISTING TURF, PLANT MATERIAL OR TREES THAT ARE DAMAGED DUE TO CONSTRUCTION ACTIVITIES, VEHICLE DAMAGE, STRESS DUE TO LACK OF WATER OR OTHER DETERIORATION OF THE EXISTING AREAS TO REMAIN ARE TO BE RESTORED BY THE CONTRACTOR TO THE EXISTING CONDITION PRIOR TO THE PROJECT AT NO ADDITIONAL COST TO THE OWNER. THIS INCLUDES DAMAGE THAT MAY OCCUR AT ANY AREA OF THE SITE.

9. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ANY VEGETATION WITHIN THE PROJECT AREA THAT IS NOT CALLED TO REMAIN AND PROTECT. ANY ADJACENT LANDSCAPE AREAS OUTSIDE THE PROJECT AREA THAT ARE TO REMAIN AND PROTECT THAT ARE DAMAGED ARE TO BE REPAIRED AND RESTORED AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR IS TO VISIT THE SITE PRIOR TO BID TO VERIFY EXISTING CONDITIONS AND IMPROVEMENTS.

10. CONTRACTOR IS TO REMOVE ALL VEGETATION AND SHRUBBERY WHERE NEW LANDSCAPING IS SHOWN. REMOVE ROOT SYSTEMS AS REQUIRED TO A MINIMUM DEPTH OF 18" BELOW GRADE FOR SHRUBS AND 24" BELOW GRADE FOR TREES. REGRADE PLANTER AREAS 1 1/2" BELOW ADJACENT CONCRETE AND TURF AREAS 1" BELOW ADJACENT CONCRETE SIDEWALKS AND CONTOUR GRADES TO INSURE POSITIVE DRAINAGE. CONTRACTOR IS TO REMOVE ALL VEGETATION, GREEN WASTE AND DEBRIS OFF SITE AT NO ADDITIONAL COST TO THE OWNER. ALL PLANTERS ARE TO HAVE A POSITIVE SLOPE AWAY FROM BUILDINGS (MIN. 2% SLOPE).

11. TREES SHALL BE SELECTED, INSTALLED AND MAINTAINED TO PROVIDE 80" MINIMUM CLEARANCE ABOVE PAVEMENT TO ANY OVERHEAD OBSTRUCTION.

TREE PROTECTION NOTES

1. ALL TREES NOT LOCATED WITHIN THE LIMITS OF CONSTRUCTION, AS DESIGNATED ON THE PLANS AND OUTSIDE OF DISTURBED AREAS SHALL BE PRESERVED. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL TREES TO BE PRESERVED FROM ALL CONSTRUCTION ACTIVITIES.

2. ALL TREES SHOWN TO BE RETAINED WITHIN THE LIMITS OF CONSTRUCTION ON THE PLANS, SHALL BE PROTECTED DURING CONSTRUCTION WITHIN CONSTRUCTION FENCING.

3. PRIOR TO EXCAVATION OR GRADE CUTTING WITHIN TREE DRIP LINES, A CLEAN CUT SHALL BE MADE WITH A CHAINSAW WITH CARBIDE TIPS, AXE MATTOCKS OR SIMILAR EQUIPMENT. IN A LOCATION AND TO A DEPTH APPROVED BY THE VA COR, TO MINIMIZE DAMAGE TO REMAINING ROOTS.

4. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES WILL BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS ARE TO BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON LEAVES.

5. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, A PLASTIC VAPOR BARRIER SHALL BE PLACED BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE CRITICAL ROOT ZONE.

6. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.

7. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN FOUR INCHES (4") SHALL BE PERMITTED WITHIN THE DRIP LINE OR CRITICAL ROOT ZONE OF TREES, WHICHEVER IS GREATER. NO TOPSOIL IS PERMITTED ON ROOT FLARES OF ANY TREE.

8. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND CONSTRUCTION EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS. ALL PRUNING MUST BE DONE ACCORDING TO VA STANDARDS AND AS OUTLINED IN LITERATURE PROVIDED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA PRUNING TECHNIQUES).

9. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.

10. REMOVE AND PROPERLY DISPOSE TREE STUMP AND ANY ROOT LARGER THAN 2" DIAMETER.

TORO TWO-WIRE PATH & STATION DECODER NOTES

1. TO EASILY IDENTIFY STATIONS FOR TROUBLESHOOTING, INSTALL WIRES WITH THE SAME COLOR CODE AS THE STATION WIRES.

2. INSTALL THE DECODER MODULE IN A VALVE BOX FOR EASE OF SERVICE.

3. MAXIMUM COMMUNICATION WIRE LENGTH BETWEEN THE CONTROLLER AND THE FARTHEST DECODER IS 15,000 FEET.

4. RECOMMENDED CABLE FOR CONTROLLER-TO-DECODER IS THE PAIGE P7350D, 14 AWG, SOLID COPPER, JACKETED 2-CONDUCTOR, DIRECT BURIAL CABLE.

5. RECOMMENDED CABLE FOR DECODER-TO-SOLENOID IS THE PAIGE P7351D, 14 AWG, SOLID COPPER, 2-CONDUCTOR, DIRECT BURIAL CABLE.

6. THE INTEGRITY OF THE COMMUNICATION CABLE IS CRITICAL TO OPERATION OF THE SYSTEM. AS IT IS BEING INSTALLED, BEFORE THE DECODERS ARE CONNECTED, LOOP THE COMMUNICATION CABLE UP OUT THE VALVE BOX LEAVING A 3 FT LOOP.

7. AT THE END OF EACH WIRE PATH, THE WIRE SHOULD BE TESTED WITH A VOLT-OHM METER TO CHECK FOR DAMAGE THAT MAY HAVE OCCURRED DURING INSTALLATION.

8. BECAUSE VOLTAGE CARRIED BY THE COMMUNICATION CABLE EXCEEDS 30 VAC, A HIGH VOLTAGE SPLICE IS REQUIRED BY THE NATIONAL ELECTRIC CODE. THE 3M DBY-6 AND DBR-6 COMPLY AS THEY ARE RATED AT 600AC.

9. WHEN USING DECODERS, IT IS RECOMMENDED TO LOCATE THE DECODER AT THE VALVE TO REDUCE THE OUTPUT WIRE PATH EXPOSURE TO LIGHTNING. IT ALSO MAKES IT EASIER TO LOCATE FOR SERVICE.

10. TDC CABLE PATH SURGE PROTECTION - SURGE ARRESTOR AND GROUNDING EQUIPMENT SHOULD BE INSTALLED NO MORE THAN 400' FROM ANY DECODER.

11. COMMUNICATION CABLE MUST BE CONNECTED BLACK TO BLACK AND WHITE TO WHITE AT ALL SPLICES.

12. VALVES MUST BE EQUIPPED WITH DC LATCHING SOLENOIDS.

13. DECODER TO SOLENOID WIRES MUST BE CONNECTED WITH CORRECT POLARITY TO OPERATE THE SOLENOID. (DECODER OUTPUT WIRES WITH BLACK STRIPE MUST BE CONNECTED TO BLACK SOLENOID WIRE.)

14. DO NOT LOOP OR CONNECT DECODER CABLE BACK TO CONTROLLER BOARD OR WIRE PATH IN TWO LOCATIONS.

100% CD - NOT FOR CONSTRUCTION SUBMITTAL	12/23/14
Revisions:	Date

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31 JULY 16
RENEWAL DATE

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ARCHITECTS ENGINEERS CONNECTED

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Approved: Project Director	
Project Title	VA MONUNMENT WALK OF HONOR
Location	FRESNO, CA
Date	12-23-14
Checked	DB
Drawn	SV
Project Number	----
Building Number	–
Drawing Number	L402
Dwg. of	

Office of Construction and Facilities Management

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